

WHAT IS CLAIMED IS

1. A method of triggering handoff from a first wireless communication system comprising:

detecting at least one pilot signal from a second wireless communication system of a different generation from said first wireless communication system;

measuring at least one target parameter from said second wireless communication system;

measuring at least one source parameter from said first wireless communication system;

determining a threshold level; and

detecting when said target parameter exceeds said source parameter by said threshold level.

2. The method of Claim 1, further comprising completing handoff to said second wireless communication system upon said detection.

3. The method of Claim 1, further comprising adding said at least one pilot from said second wireless communication system to an active set.

4. The method of Claim 1, further comprising

dynamically adjusting the threshold value.

5. The method of Claim 1, wherein at least one of the source parameter or target parameter is a pilot signal strength.

6. The method of Claim 1, further comprising sending instructions for completing a handoff.

7. The method of Claim 1, further comprising completing a handoff autonomously.

8. The method of Claim 1, further comprising determining a statistic of one or more of said at least one source parameter and said at least one target parameter.

9. The method of Claim 8, wherein determining the threshold level comprises computing the threshold level based on said statistic.

10. The method of Claim 1, wherein said threshold level is communicated to a mobile station from a base station.

11. The method of Claim 10, wherein said communication of said threshold level is part of an inter-generation handoff message.

12. The method of Claim 2, wherein handoff to said

second wireless communication system occurs a predetermined time after said detection is made and remains true.

13. The method of Claim 12, wherein said predetermined time is calculated based on one of the group consisting of a proximity of a source pilot signal to a drop threshold, a proximity of a target pilot signal to a drop threshold, a weakness of a source pilot signal, a past history of a source pilot energy, a past history of a target pilot energy, and a filtered pilot energy.

14. The method of Claim 1, wherein determining said threshold level comprises calculating said threshold based on one of the group consisting of a proximity of a source pilot signal to a drop threshold, a proximity of a target pilot signal to a drop threshold, a weakness of a source pilot signal, a past history of a source pilot energy, a past history of a target pilot energy, and a filtered pilot energy.

15. The method of Claim 1, wherein at least one of said source parameter or target parameter is a round-trip delay value.

16. The method of Claim 1, wherein determining said threshold value comprises evaluating two or more pilot

strengths.

17. A system for enabling handoff from a first wireless communication system to a second wireless communication system comprising:

a first wireless communication system comprising a plurality of base stations which each transmit a signal;

a second wireless communication system of a different generation than said first wireless communication system, comprising a plurality of base stations which each transmit a signal;

a mobile station which detects at least one pilot signal from said second wireless communication system, wherein the mobile station measures at least one target parameter from said second wireless communication system and at least one source parameter from said first wireless communication system, wherein the mobile station determines a threshold level and detects when said target parameter exceeds said source parameter by said threshold level.

18. The system as recited in Claim 17, wherein the mobile station completes handoff to said second wireless communication system upon said detection.

19. The system as recited in Claim 17, wherein the mobile station adds said at least one pilot from said second wireless communication system to an active set.

20. The system as recited in Claim 17, wherein the mobile station dynamically adjusts the threshold value.

21. The system as recited in Claim 17, wherein at least one of said source parameter or target parameter is a pilot signal strength.

22. The system as recited in Claim 17, wherein said mobile station receives instructions for handoff from a base station.

23. The system as recited in Claim 17, wherein said mobile station completes handoff autonomously.

24. The system as recited in Claim 17, wherein said mobile station determines a statistic of one or more of said at least one source parameter and said at least one target parameter.

25. The system as recited in Claim 24, wherein said mobile station computes the threshold level based on said statistic.

26. The system as recited in Claim 17, wherein said mobile station receives said threshold level from a base station.

27. The system as recited in Claim 26, wherein said threshold level is part of an inter-generation handoff message.

28. The system as recited in Claim 17, wherein said mobile station hands off to said second wireless communication system after a predetermined time elapses since said detection is made and remains true.

29. The system as recited in Claim 28, wherein said predetermined time is calculated based on one of the group consisting of a proximity of a source pilot signal to a drop threshold, a proximity of a target pilot signal to a drop threshold, a weakness of a source pilot signal, a past history of a source pilot energy, a past history of a target pilot energy, and a filtered pilot energy.

30. The system as recited in Claim 17, wherein said mobile station calculates said threshold based on one of the group consisting of a proximity of a source pilot signal to a drop threshold, a proximity of a target pilot signal to a drop threshold, a weakness of a source pilot signal, a past history

of a source pilot energy, a past history of a target pilot energy, and a filtered pilot energy.

31. The system as recited in Claim 17, wherein said at least one source parameter or said at least one target parameter is a round-trip delay value.

32. The system as recited in Claim 17, wherein said mobile station determines said threshold value by evaluating two or more pilot strengths.